

Claims

Please amend the claims as follows:

1. (Currently amended) A system for mapping an input device's controls to interact with an application, the system comprising:

a user input device having a plurality of controls;

an application that implements a set of actions comprising semantics of an application genre in response to activation of the controls of the user input device; and

an ~~application program interface~~ action-control setup interface comprising a plurality of application genres;

wherein upon an initial configuration of the application, the application calls the action-control setup interface with an input parameter comprising a data structure of the set of actions and the application genre, wherein the action-control setup interface that receives calls from the application, the application program interface including a call that creates an association between associates the set of actions in the data structure to the plurality of controls of the user input device in the application and the controls on the user input device, wherein creating the association comprises considering based on the semantics of the application genre related to the actions in the application.

2. (Currently amended) The system of claim 1, wherein the application can override the association created by ~~application program~~ action-control setup interface.

3. (Currently amended) The system of claim 1, wherein an action in the set of actions comprises ~~is~~ an application behavior resulting from a user's operation of the a controls on the user input device.

4. (Currently amended) The system of claim 1, wherein ~~creating~~ the association further includes linking a control-semantic set to an action-semantic set by way of a the genre, wherein the genre is a set of actions common to applications of a similar type.

5. (Currently amended) The system of claim 1, wherein the ~~application program~~ action-control setup interface considers user preferences in creating the association.

6. (Currently amended) The system of claim 1, wherein the ~~application program~~ action-control setup interface considers information provided from the device manufacturer in creating the association.

7. (Currently amended) The system of claim 1, wherein the ~~application program~~ action-control setup considers similar applications that a user has configured to determine the association between an action and a given device control.

8. (Currently amended) The system of claim 1, wherein the ~~application program~~ interface data structure comprises ~~binds actions of the application to semantics in a genre by using a structure having~~ an action value, a predefined action semantic associated with the action value, and a label for the action.

9. (Canceled)

10. (Currently amended) The system of claim 9, wherein the ~~application program~~ action-control setup interface returns to the application an enumeration of input devices connected to the system that match the actions of the application.

11. (Currently amended) The system of claim 9, wherein in response to an application call, the ~~application program~~ action-control setup interface examines all input devices connected to the system and invokes an application-defined callback function to enumerate the connected devices that match the application actions.

12. (Original) The system of claim 1, wherein the application receives its own application codes as incoming input device data.

13. (Currently amended) The system of claim 1, wherein the ~~application program~~ action-control setup interface ranks input devices based on suitability of actions of the application.

14. (Currently amended) The system of claim 1, further including an ~~application program~~ action-control setup call to display a default input device configuration.

15. (Original) The system of claim 14, further including automatically obtaining system information about input devices connected in the system, retrieving custom settings provided by the user, and rendering the user interface for input devices using system information and custom settings.

16. (Original) The system of claim 1 further including building an action map.

17. (Original) The system of claim 16 further including setting the action map after it is built.

18. (Original) The system of claim 17, wherein setting the action map includes mapping physical controller codes of the input device to physical application codes.

19. (Original) The system of claim 16 wherein building an action map includes obtaining information about user preferences and hardware manufacturer defaults to create the association between actions and device controls.

20. (Previously presented) The system of claim 1 wherein the application is a game application.

21. (Previously presented) The system of claim 1 wherein the input device includes a mouse, keyboard, game controller, force feedback device, or combinations thereof.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Original) A method for mapping an input device's controls with an application in a system, comprising:

in response to a request from an application program to create an action-to-control mapping, reading stored user preferences for the action-to-control mapping and reading a stored default file that includes manufacture provided defaults for the action-to-control mapping;

reading a structure that includes action values and action semantics associated with the action values; and

using the stored user preferences and the stored default file to create an association between the action values associated with the application and the controls on the input device.

28. (Original) The method of claim 27, wherein the creating includes creating a control-to-action map and further including setting the action map to allow the application to receive data from the input device.

29. (Previously presented) The method of claim 27 further including, in response to a request from the application, enumerating input devices attached to the system that are most suitable to the application.

30. (Canceled)

31. (New) A method for mapping actions in an application to controls on a user input device, the method comprising:

receiving a call from the application to create an initial configuration that associates actions corresponding to application commands to controls on a user input device;

dynamically generating an action-to-control map to implement the initial configuration that associates actions to controls on the user input device, wherein the initial configuration is based on data received from the application; and

using the action-to control map to translate a set of command codes from the user input device to the corresponding commands in the application.

32. (New) The method of claim 31 further comprising storing the action-to-control map for the application and the user input device in a file.

33. (New) The method of claim 32 comprising performing a check for the stored file on subsequent instantiations of the application.

34. (New) The method of claim 31 wherein the call received from the application comprises a user-preference file to identify a previously created action-to-control map.

35. (New) The method of claim 32 wherein the previously created action-to-control map is associated with a different application.

36. (New) The method of claim 31 wherein the call received from the application comprises a default mapping stored in a file provided by the hardware vendor that indicates the action-to-control map for the application.

37. (New) The method of claim 31 wherein the call received from the application comprises semantics associated with the set of actions from the application, wherein the semantics from the application are associated to the controls using lightweight heuristics.